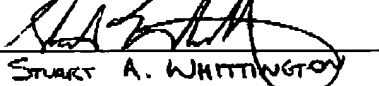


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I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING FACSIMILE TRANSMITTED TO THE U.S. PATENT AND TRADEMARK OFFICE (FAX NO. 571-273-8300) ON THE DATE INDICATED BELOW:

Date of Transmission: 8/3/2006 By: 
STUART A. WHITTINGTON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Jeremy Burr

Atty. Docket: P9810

Appln. Ser. No.: 09/773,682

Group Art Unit: 2155

Filed: January 31, 2001

Examiner: Tran, Phillip B.

For: ENABLING RESTRICTED COMMUNICATIONS BETWEEN A PLURALITY OF
USERS

DECLARATION UNDER 37 CFR §1.131
OF JEREMY BURR

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

I, Jeremy Burr, hereby declare that:

1. I am a citizen of Great Britain, and currently reside at 2816 NW
Savler Street, Portland, OR 97210.
2. I am currently an employee of Intel Corporation.
3. The invention claimed in the above-referenced patent
application was conceived at least as early as April 28, 2000, as evidenced by the
enclosed "Intel Invention Disclosure" entitled "Children's instant messaging"

Art Unit: 2155
A/N: 09/773,682

1

P9810

Best Available Copy

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(hereinafter "the attached Exhibit"). The information present in the attached Exhibit directly describes the invention set forth in the claims of the above-referenced patent application.

4. I am the author of the subject matter in the attached Exhibit, which was prepared with the assistance of another (Ann Ruminski).

5. I have reviewed the attached Exhibit and believe it to be a true copy of the document I authored.

6. Since first conception of the invention described in the attached Exhibit, I diligently pursued the invention including working with other Intel engineers to reduce the conceived invention into practice for an Intel Wireless Series Product line, as well as working with attorneys in preparing and filing the above-referenced patent application in accordance with the following time line:

7. I joined Intel in November of 1998 and worked with the Connected Products Division (CPD) in developing products such as the wireless base station, keyboard, mouse and gamepad. In January 2000, I moved into the Architecture team for CPD and began development of the "Missoula Kid Chat platform." The Missoula Kid Chat platform was a derivative of a previous Intel product called the "Fiji" Internet Message Pad, which was aimed to produce a low cost (~\$99) appliance for young adults and teens. For the Missoula Kid Chat platform, I proposed an architecture which stripped back features of the previous Fiji project to result in an even lower cost (~\$50) device directed toward pre-teen users rather than teens and young adults.

8. I diligently pursued my work, without any delays, on the Missoula Kid Chat platform during the period of January 2000 to June 2000 including:

-creating a full size, solid model for the device shown in Section 3, page 4 of the attached Exhibit;

- developing the Missoula architecture;
- creating a target margin stack demonstrating \$22 bill of material cost;
- worked on Kid protection issues for the Missoula Kid Chat platform which directly resulted in preparation and submittal of the invention disclosure form shown in the attached Exhibit;
- purchased materials to build the functional prototype; and
- presented the Missoula Kid Chat project for a Concept Approval Review.

9. Evidence of this ongoing work can be observed in Attachment B which is a summary report prepared in 2000 of my activities between April 1-June 30, 2000. Although support for the specific architecture proposed for the Kid Chat device did not receive sufficient support at the Concept Approval Review and consequently the prototype using the original purchased materials was not produced at that time, I continued to work on low cost wireless communication devices targeted toward child use to include the kid protection schemes as described in the above-referenced patent application, without interruption and during the normal course of performing all my duties, throughout 2000. In November 2000, I received Concept Approval to further research a Bluetooth™ version of the original Kid Chat product concept. Evidence of my continuing work on these messaging concepts can be observed in Attachment B which is a copy of the Concept Approval presentation given in November of 2000. The Kid Chat device is apparent on the first page of the presentation of Attachment B and my focus continued to be on developing wireless communication devices for the pre-teen and early teen markets as these were markets deemed important for these types of low cost devices.

10. My team and I continued to diligently reduce embodiments of the Kids Chat invention and related communications concepts to practice throughout the remainder of 2000 and through April 2001 when the Intel Connected Products

EXHIBIT

AUG 03 2006

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14426

INTEL INVENTION DISCLOSURE
ATTORNEY-CLIENT PRIVILEGED COMMUNICATION

MAY - 1 2000

DATE: 4/28/2000

Connected Products / CPD

It is important to provide accurate and detailed information on this form. The information will be used to evaluate your invention for possible filing as a patent application. When completed and signed, please return this form to the Legal Department at JF3-147. If you have any questions, please call 264-0444.

1. Inventor: Burr Last Name Jeremy First Name Middle Initial
 Phone 503-264-3590 M/S: JF1-32 Fax # 503-264-1790
 Citizenship: Great Britain WWID 10021140 Contractor: YES NO x
 Inventor E-Mail Address: jeremy.burr@intel.com
 Home Address: 338 NW 20th Avenue #9
 City Portland State OR Zip 97209 Country USA
 *Corporate Level Group (e.g. IABG, NCG, CEG) NBG Division CPD Subdivision
 Supervisor Narasimha Kumar WWID 10021140 Phone 503-264-1757 M/S: JF1-32

Inventor: Last Name First Name Middle Initial
 Phone M/S: Fax #
 Citizenship: WWID Contractor: **RECEIVED**
 Inventor E-Mail Address:
 Home Address: MAY 3 - 2000
 City State Zip Country
 *Corporate Level Group (e.g. IABG, NCG, CEG) Division Subdivision
 Supervisor WWID Phone M/S:

PATENT DATABASE GROUP
INTEL LEGAL TEAM

*If you are unsure of this information, please discuss with your manager.

(PROVIDE SAME INFORMATION AS ABOVE FOR EACH ADDITIONAL INVENTOR)

2. Title of Invention: children's instant messaging (Intel Project Name TBD)
3. What technology/product/process (code name) does it relate to (be specific if you can):
Intel® Wireless Series Product line
4. Include several key words to describe the technology area of the invention in addition to # 3 above: "one thought big",
parental authority, buddy list, instant communication, instant messaging
5. Stage of development (i.e. % complete, simulations done, test chips if any, etc.)
product concept - first working prototypes in mid-June, alpha testing in mid-July
6. (a) Has a description of your invention been, or will it shortly be, published outside Intel:
 NO: x YES: If YES, was the manuscript submitted for pre-publication approval?
 IDENTIFY THE PUBLICATION AND THE DATE PUBLISHED:
- (b) Has your invention been used/sold or planned to be used/sold by Intel or others?
 NO: x YES: DATE WAS OR WILL BE SOLD:

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(c) Does this invention relate to technology that is or will be covered by a SIG (special interest group)/standard/ or specification?

NO: ☒ YES: _____ Name of SIG/Standard/Specification: _____

(d) If the invention is embodied in a semiconductor device, actual or anticipated date of tapeout? N/A

(e) If the invention is software, actual or anticipated date of any beta tests outside Intel the software is embedded in the product - there will not be a separate beta test cycle

7. Was the invention conceived or constructed in collaboration with anyone other than an Intel blue badge employee or in performance of a project involving entities other than Intel, e.g. government, other companies, universities or consortia? NO: ☒ YES: _____ Name of individual or entity: _____

8. Is this invention related to any other invention disclosure that you have recently submitted? If so, please give the title and inventors: no

**PLEASE READ AND FOLLOW THE DIRECTIONS ON
HOW TO WRITE A DESCRIPTION OF YOUR INVENTION**

Please attach a description of the invention to this form, DATED AND SIGNED BY AT LEAST ONE PERSON WHO IS NOT A NAMED INVENTOR, and include the following information:

1. Describe in detail what the components of the invention are and how the invention works.

Abstract:

A mechanism for children's instant messaging, to include (i) a wireless hand-held device optimized for instant messaging, and (ii) a secondary protective software layer between the child and the Internet world to screen inappropriate content and potentially harmful relationships.

Problem Statement:

Children aged 8 - 11 want to talk to their friends as much as possible. They want easy convenient instant communication in real-time on many different levels. They want to talk on the phone, browse through Web pages, watch TV, send e-mail and use instant messaging to talk to their buddies. They want to chat; they are unconcerned about adult subjects like stock prices, appointments, weather, etc. They are also unconcerned about any potential trouble or inappropriate content. Their parents are understandably very concerned about content and their worst fear is a pedophile masquerading as a child, lurking on the Internet or in chat rooms. Therefore they actively prohibit instant messaging for their children under the age of 12. This invention, Intel Project Name TBD is a combined hardware and software solution to the concerns of both children and parents.

This invention focuses on the essence of messaging which is instant communication. This communication is in the form of transient conversations between friends where each sentence is "one thought big". This invention combines hardware and software to represent "one thought big" per screen as one expression in a conversation. The LCD frames the thought.

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Assumptions:

We assume that the client PC is running and connected to the Internet or that it can be activated by this wireless device. We also assume that the Intel Wireless Base Station is connected and has an available channel for each Intel Project Name TBD device. These devices inherit the same characteristics and limitations of long-range devices on an Intel Wireless Series network.

Details:

The device runs with the Intel Wireless Base Station which can handle up to 8 devices within the home environment. The wireless link operates at 11 kilobits per second per channel so a complete screen refresh occurs in 1/10 of a second.

The device footprint is approximately 90x60x25mm. There is one LCD display; the LCD size is 4 lines with 20 characters per line. Each character is 3mm in height. In memory, the display is divided into two screens. One screen is used for the user's current thought; the other screen is a memory stack of the ongoing history of the current conversation. Each message thought is sent to one or more buddies as soon as the user presses the enter key. In an actual conversation, the user types their one thought in the bottom display line. The top three lines display the last three thoughts from one or more buddies as part of the history of the conversation. The user can press the select button to easily toggle between typing their thought and reading the thought(s) from his/her buddies. The user scrolls up and down to see the previous text in the memory stack. There is no option to change font type, size or color. There is no formatting capability; users can add extra spaces to prevent splitting a word between lines.

Users are informed when a friend or buddy comes online or goes offline by a beeping or vibrating mechanism. There can be multiple buddies online participating in the same conversation thread.

Within the software hosted on the PC (not on the device) there is a safety feature that is a secondary protective software layer between the child and the Internet world to screen inappropriate content and potentially harmful relationships. There is password protection on the PC (managed by the parent) that prevents the children from adding or subtracting buddies from their approved buddy list. Parents take responsibility for knowing their children's friends and adding them, when requested. The secondary protective software layer ignores potential buddies who are unauthorized and prevents communication to/from these unauthorized buddies.

Claims:

A mechanism for children's instant messaging, to include:

- (i) a wireless hand-held device optimized for instant messaging, and
- (ii) a secondary protective software layer between the child and the Internet world to screen inappropriate content and potentially harmful relationships.

2. Describe advantage(s) of your invention over what is done now.

Like other Intel Wireless Series peripherals, this invention is mobile in the range of home and garden (within 30 meters of the Base Station). Unlike other peripherals, this mobility along with its small size and therefore wearable portability greatly increases the convenience and fun factor. Like conversation, but unlike other communications devices, there is no permanent record; when the child exits the conversation or turns off the device, the words vanish.

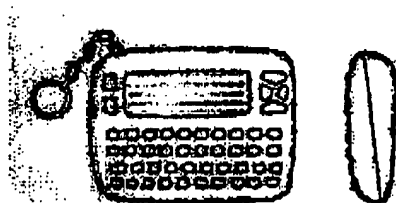
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ATTORNEY-CLIENT PRIVILEGED COMMUNICATION

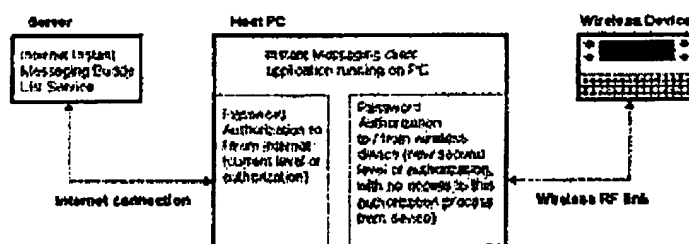
There are many chat services that offer one level of password protection and allow users to check profiles of potential friends or buddies online. However, there is nothing to prevent nefarious characters from masquerading as children when they register. Unlike these services, this invention offers a second level of protection. It allows parents to exercise real control to limit their children's buddy list to children the parents know at school, church or synagogue, in the neighborhood or socially. The parents prevent unknown buddies from communicating with their children and the child never sees any unknown buddies in their buddy or friend list.

3. **YOU MUST include at least one figure illustrating the invention. If the invention relates to software, include a flowchart or pseudo-code representation of the algorithm.**

Wireless Device



2nd level of password authorization



INTEL CONFIDENTIAL**ATTORNEY-CLIENT PRIVILEGED COMMUNICATION****4. Value of your invention to Intel (how will it be used?).**

This invention is a key proof of concept for the View architecture.

- It follows existing architecture so it is simple to develop and manufacture.
- Using an existing architecture ensures low cost so children and/or their parents can afford the product.
- It extends the Intel Wireless Series Product line, leveraging the primary differentiating feature – multiple devices operating simultaneously.
- It opens a large, virtually untapped segment of the population to Intel products, developing a new branded product line.
- It protects Intel's investment in developing this new branded product line.
- It is cool enough to wear to school on a backpack.

5. Explain how your invention is novel. If the technology itself is not new, explain what makes it different.

The technology itself is not new. The Intel Wireless Series Product line is an enabling technology. The software is standard I/O modules with buffering. The hardware is physically structured in a non-obvious way around a single thought. This is a wireless pager-sized hand-held device that promotes a very different usage model, that very closely approximates intimate conversation between close friends. There are no extraneous functions or distractions; it is optimized for framing the thought.

6. Identify the closest or most pertinent prior art that you are aware of.

The Intel Fiji Architecture is a portable wireless device that incorporates a graphical display and full QWERTY keyboard. It provides a much richer Internet experience supporting e-mail, chat room conversations, text-based Web browsing in addition to instant messaging. By definition, this product is larger, more expensive and not optimized for the immediacy of instant messaging.

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7. Who is likely to want to use this invention or infringe the patent if one is obtained and how would infringement be detected?

Manufacturers of wireless communication devices, Internet messaging services such as AOL, Yahoo and Microsoft and leading-edge toy companies. If there is a retail wireless device that is (probably) physically small and supports instant messaging, any knowledgeable engineer can detect infringement by purchasing the device and checking the functionality. If instant messaging is the device's primary or only function, claim i of this patent is likely to be infringed. Any knowledgeable engineer can also review the software interface presented to the device. If the device supports a secondary authority software layer, claim ii of this patent is also likely to be infringed.

Assistance for this Invention Disclosure Form provided by Patent Builders:

Name: Ann Ruminski
Ann Ruminski

Date: 4/28/2000

Intel employee who is knowledgeable about this invention, but who is not a named inventor.

Name: Robert C. Brown
Robert C. Brown

Date: 4/28/2000

HAVE YOUR SUPERVISOR READ, DATE AND SIGN COMPLETED FORM

DATE: 4/28/2000

SUPERVISOR: [Signature]

Narasimha Kumar (Jeremy Burr's manager)

BY THIS SIGNING, I (SUPERVISOR) ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THIS DISCLOSURE, AND RECOMMEND THAT THE HONORARIUM BE PAID

[Signature]
2000-04-28

ATTACHMENT A-1

2000Q2 in review - Jeremy Burr 2000-06-26**Summary**

- A successful quarter, as I transitioned fully into SNBD.
- Completed the SplitRock hand-off to engineering.
- Created a wireless products roadmap to spur discussion of new products
- Created several new ideas based upon this roadmap, including "Kids' Keyboard", "wireless gaming" and "KidChat" which received traction during the quarter.
- Was the only individual within SNBD to take any new ideas to Concept Approval meeting within the quarter.
- Was the only individual within SNBD to undertake (or complete) any new-concept prototyping projects within the quarter (except for Sunset).
- Richland (wireless gaming) received Concept Approval 0
- Missoula (KidChat, TV Buddy) presented for Concept Approval 0 but needs marketing support to achieve such approval.

Hand Off SplitRock

- Released RF Modules (Base and Device) to Mass Production after successful Manufacturing Pilot Review.
- Ongoing support during quarter to resolve issues (Wings System Timing, TI datasheet timing specifications [elevated to GM level], Semco workmanship issues, testing methods [at Alps and Semco], PCB filter performance issues, BER/PER/duty cycle issues, basic RF performance). This support occurred as scheduled conference calls, on-site and Asian Design Reviews.
- Reviewed and updated the engineering and manufacturing tests and specifications required for Mass Production of the RF Modules (Semco Approval Sheet)
- Correlated range analysis spreadsheet with empiric data to make spreadsheet predictive.
- Consultant to Long-Range Device programme for Fiji.
- Directed, then assisted, in collation of FCC documents.
- Relieved of SplitRock duties to move fully into SNBD.

Create New Concepts

- Identified the following new ideas. Kids' Keyboard, HomeGrocer, TV Buddy, KidChat, Monopole Gamepad, Recipe Stand, Security Device (Thumbprint), e.stamps printer, toroid steering wheel, boot sensor,
- Brainstormed additional wireless gaming devices with Roger Finger WW26
- Brainstormed additional concepts in Sapiient discussions.
- Presented 8 ideas to Toy Lab for review, of which KidChat showed promise
- Created a wireless products roadmap to spur discussion of new products
- Created foam models to spur discussion of new products (resulting in Missoula Architecture CA-0 review)
- Submitted 2 patents (see KidChat below)
- Unsuccessful CA-0 review for Missoula Architecture (see below)
- Successful CA-0 review for Richland (wireless gaming - see below)
- Was the only individual within SNBD to take such (new) ideas to Concept Approval meeting within the quarter.

ATTACHMENT A-2**Richland (Wireless Gaming)**

- Successful Concept Approval 0 Review, releasing funds and cycles to pursue development of potential products in this space
- Defined legal language to export Intel source code for concept development purposes
- Prototyping key technologies for wireless gaming platform
 - Engaged with joystick manufacturer
 - Engaged with contractor for firmware development
 - Engaged with contractor for accelerometer prototyping.
- Created snowshoe prototype (from shinguard + wired gamepad's accelerometer) for focus group studies.

Missoula Architecture (PC Surrogate)

- Missoula Architecture is a development platform which re-uses the considerable engineering effort invested in the Microchip PIC architecture used by the SplitRock mouse/keyboard/gamepad.
- Unsuccessful Concept Approval 0 Review due to lack of marketing support for the potential products discussed (Wolf Point = KidChat, Pondera = TV Buddy, Home Grocer)
- Created target margin stacks, based upon Keku BOM and Dan Janis' margin stack model.
- Created marketing materials from interpreted Fiji PEM marketing materials (for Wolf Point) and from IAL eTV proposal to CPD (for Pondera)
- Created screen shot storyboard of usage model
- Resolved Kid protection issues with 2nd level password authorization scheme
- Engaged with external contractors to achieve swift and cheap concept prototypes. Stayed on schedule and well under budget, until project rejected at Concept Approval 0 Review.
- Created solid models of Missoula architecture-based products (with and without QWERTY keyboard)
- Created full-sized non-working prototype of Missoula Architecture.
- Despite curtailed funding, working prototypes will be available before July 4th weekend, in a generic sense as they have no specific application software. These prototypes will be used for wireless gaming prototype development.
- Submitted 2 invention disclosures based on KidChat. Utility Patent entitled "wireless handheld device optimized for instant messaging" and an associated Design Patent for the industrial design.

Kalispell (Kids' Keyboard)

- Met Q2 MBO as successful prototyping deliverable, by demonstrating two Kalispell Keyboards operating simultaneously running prototype kids' application.
- Directed the development of "Myna.exe" which is a "Notepad"-like application to demonstrate usage.
- Acquired commercial software (from Little Tykes) which is more age-appropriate for demonstrating kids' play patterns.
- Insufficient market data and perceived differentiation from current CPD products to submit for CA-0 review during Q2.

ATTACHMENT A-3**Deliver Existing Concepts****Sunset (Wireless Camera)**

- EE and RF Consultant to Semco for Sunset programme
- Multiple reviews of schematics created by Semco
- Identified usage indicators and implementation during Design Review at Semco (eg. RF link, low batt)
- Identified usage "feedback" issues during Design Review at Semco (eg. white balance, focus)
- Provided design guidance (on power supply design, low power design, IR circuit design, software power down operation) to Semco
- Reviewed Sunset BOM pricing
- Provided EE and RF feedback to Fiori ID development

Cabo (Architecture with colour graphics LCD)

- Provided some assistance to Cabo project, related to early directions and BOM estimates for Cabo
- Acquired an HP Jornada 820 for comparative pricing analysis

Improve Idea Creation Process

- Presented "House of Quality" as a possible format for standardized project evaluation
- During limited tenure within SNBD, have started identifying areas for improvement within SNBD idea creation process. Limited sharing of these perceptions to date (mainly with Kumar).

Other Items

- Presented Wireless Products Roadmap
- Discussions within CPD (Krishnan, Bob Brown, Herman) about CPD wireless technology roadmap (eg. Wings, Bluetooth, Brand-X)
- Attended pre-requisite management class for the MTP training in July.

ATTACHMENT B-1

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Connected Products Division

Messaging Product Family Concept

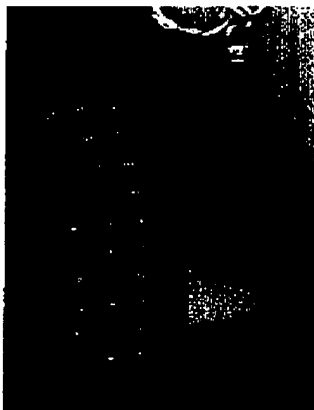
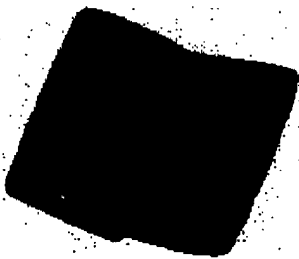
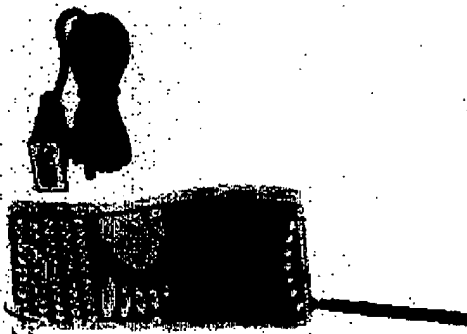
Proposal - Research Bluetooth implementation of Messaging product family

Today's agenda:

- Present research proposal
 - Product characteristics
 - Goals of research
 - Technical issues for study
 - Marketing issues for study
 - Methodology
 - Deliverables
 - Milestones
- Q&A

Meeting objective:

- Achieve Phase I approval for Messaging Product Concept

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ATTACHMENT B-2

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Connected Products Division

Messaging Product Family Concept

Proposed Product Characteristics:

- Peer to peer, multi-user, 50m, 2-way messaging

Comments from Phase
Review are in Red

Goals of Research:

- | Topic 3 | Topic 2 | Topic 1 |
|---------|--|---|
| | | <ul style="list-style-type: none">• Investigate usage model |
| | | <ul style="list-style-type: none">• Identify age and gender specific product appeal |
| | | <ul style="list-style-type: none">• Understand cost basis for this family of products |
| | <ul style="list-style-type: none">• Explore technical feasibility of Messaging Products | |
| | <ul style="list-style-type: none">• Explore Bluetooth range, power, cost, SW and HW architecture | |
| | <ul style="list-style-type: none">• Explore the next generation wireless base station for CPD | |

3rd Topic is much lower priority within exploration phase

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Attachment B-3

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Connected Products Division

Messaging Product Family Concept

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Technical issues for study:

- Building a peer to peer network stack
 - Topology and capacity of Bluetooth peer to peer network
- Explore
- ~~Design~~ of cost effective architecture for Bluetooth
- Explore
- ~~Validate~~ Ambler and WLPO radios for CPD
 - Software stack for common Messaging/Communications Architecture/Applications



Marketing issues for study:

- Are text messaging and swarm-nets a compelling application ?
- What other functionality should be incorporated ?
 - eg. is there a need for voice ? audio ? peer to peer gaming ?
- What other Bluetooth devices will be available in 2002 ? / Messaging Devices
- What other products can be included in this product family ?

Attachment B-4

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Connected Products Division

Messaging Product Family Concept

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Methodology:

- Acquire Bluetooth hardware and software development kits
- Look for peer to peer software stacks that can be acquired
- Study usage models
 - Coordinate with STL regarding teen play patterns
 - Examine comparable devices to understand usage models
 - eg. Cybiko, Mot. Talkabout, BT phones, RIM BlackBerry
 - Place in homes for informal field trials
- Identify appropriate conferences, seminars and market research reports to help understand the environment for comms. products.

Deliverables:

- Characterize the market opportunity
- Details of ecosystem
- Usage model defined
- ~~Product definition - 1st order~~
- Technical assessment
 - Feature verification, risk assessment, HW + SW requirements

Attachment B-5

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Connected Products Division

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Messaging Product Family Concept

Milestones:

- Concept Approval Phase II review - Jan/Feb 2001
- ~~DTA review - June 2001 (to coincide with Plan 2002 PLBP)~~

What we are asking for:

- Phase I Concept Approval to research a Bluetooth implementation of a Messaging product family.
 - Phase I Concept Approval releases limited funds and resources within SNBD and Advanced Engineering groups to address this research.
 - This programme is above ZBB

Phase 1 Concept Approval status was granted ☺

Q&A:

Adjourn:

ATTACHMENT C-1

intel

Messaging concepts: new ways of using messaging for teenagers 10-14



January 6th, 2001

ATTACHMENT C-2

EXIBITION

N5

A hand is shown holding a telephone receiver. The screen of the phone displays a list of names: "Gordon", "John", "Susan", "Nick", "Drew", "Nancy", "Wendy", "Michelle", and "Marilyn".

1. Outside school, you look at your Thing, and see that 3 of your buddies are in the area.

2. You select a friend to send a message to.

A black and white illustration of a hand holding a mobile phone. The phone's screen displays the text "Meet me @ Gap?". The phone has a numeric keypad and several function buttons. The hand is shown from the side, with the thumb resting on the left edge of the device.

3. Type your message

A black and white illustration of a hand pressing a button on a mobile phone. The phone's screen displays the text "Message Sent".

4. The message is sent

5. Nathan comes into range and a previously written message is sent to him,

intel

messaging concepts

Attachment D-1

An Emergent Approach to Distributed Networking

Jeremy Burr
Intel Corporation

Version 1.0
2001-01-19

Intel Confidential Information

Intel Confidential

An emergent approach to distributed
networking

ATTACHMENT D-2

Minimal rule set for Intel Things (1 of n)

- **Intel Things are self sufficient**
 - they contain sufficient resources to act independently.
 - (over time it is possible that Intel Things act parasitically and do not have sufficient resources internally, but this will not be considered for the initial products introduced)
- **Intel Things look after themselves first**
 - There is a hierarchy to this minimal rule set
- **Intel Things have a local Buddy list**
 - The local buddy list may synchronize to the buddy list maintained on the PC, but this is not a requirement
- **Intel Things are aware of neighbouring Things**
 - An Intel Thing is aware of all other Intel Things within range (~100m)
 - The "presence" of the other Thing is reported
 - The Buddy or Non-Buddy status can be determined
 - Thing information can be cloaked / hidden / invisible mode
- **Intel Things share the "presence" of their Buddy Lists**
 - Sharing presence allows contiguous threads of buddies to create a "fabric" of Things
- **Intel Things can relay information across this fabric between Things**
 - Networking details at this time are TBD.
 - Assume small world implementations with emergent behaviors

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An emergent approach to distributed
networking

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